## 3.10 Cultural Resources

#### 3.10.1 Affected Environment

The Proposed Action is located in the periphery of the Delta Region, as defined in the CALFED PEIS/EIR (CALFED Bay-Delta Program 2000). Over the last 20–30 years, 12 cultural resource studies have been conducted in the footprint of the Proposed Action, such that intensive survey coverage of the project footprint has been completed (Bard 2001; Canaday et al. 1992; Chavez 1995; Holman 1982, 1983, 1984; Jensen & Associates 1986; Jones & Stokes Associates 1989; Moratto et al. 1990; Moratto et al. 1994; Peak 2002; Werner 1988).

The Proposed Action potentially would affect five cultural resources: the DMC, the California Aqueduct, the Byron Bethany Irrigation District Main Canal (CA-Ala-549H/CA-CCo-738H), the Tracy Switch Station (P-01-10443), and Tracy Pumping Plant (P-01-10442).

#### **Cultural Setting**

#### Prehistory and Ethnography

Little is known of human occupation in the Delta prior to 4500 B.P. (years before present, with *present* being 1950). Because of rapid alluvial and colluvial deposition in the valley over the past 10,000 years, ancient cultural deposits are deeply buried in many areas. The earliest evidence of widespread occupation of the Delta region comes from several sites assigned to the Windmiller Pattern (previously, Early Horizon), dated ca 4500–2500 B.P. (Ragir 1972). Known Windmiller Pattern sites are concentrated on low rises or knolls within the floodplains of major creeks or rivers. Later prehistoric archeological sites attributed to the Berkeley and Augustine Patterns (previously Middle and Late Horizon) exhibit wider geographic distribution, though few archaeological sites have been identified in the vicinity of the Proposed Action.

The aboriginal inhabitants of the area in which the Proposed Action is located are known as the *Cholvon* Northern Valley Yokuts and the *Luecha* tribelet of Costanoan Indians (Milliken 1994; Schenck 1926). *Yokuts* is a term applied to a large and diverse number of peoples inhabiting the San Joaquin Valley and Sierra Nevada foothills of central California. The Yokuts cultures include three primary divisions, corresponding to gross environmental zones: the Southern Valley Yokuts, the Foothill Yokuts, and the Northern Valley Yokuts (Kroeber 1976; Silverstein 1978). Principal Northern Valley Yokuts settlements were located on the tops of low mounds, on or near the banks of the larger watercourses. Yokuts settlement, however, focused on the Delta proper and the San Joaquin River (Wallace 1978).

Anthropologists and archaeologists typically attribute the margins of the northern San Joaquin Valley and the Delta to the Northern Valley Yokuts. Recent archival research, however, indicates that a small group of Indians speaking a Costanoan language lived near and may have periodically used the margins of the valley—this group is the Luecha tribelet of Costanoan Indians. The Luecha inhabited Arroyo Mocho, Corral Hollow, and Patterson Pass in the South Coast Ranges (Patterson Pass is about 3 miles southeast of DMC milepost 7.69). The Luecha probably had social ties to the valley, as indicated by marriages to the Cholvon and Pitemes Northern Valley Yokuts. The Luechas intermarried with other Costanoan-speaking groups in the eastern South Coast Ranges, however, suggesting a greater focus of activities in the uplands west of the valley. (Milliken 1994.)

The area that would be affected by ground disturbance associated with the Proposed Action has little potential to contain surface or buried archaeological sites. First, the footprint of the Proposed Action has been thoroughly surveyed for cultural resources, and no archaeological sites have been identified in that footprint. Second, there is little potential for the Proposed Action's footprint to contain buried archaeological sites because of the nature and degree of ground disturbance that resulted from construction of the DMC and the California Aqueduct. The DMC ROW, for instance, was excavated to depths of 25 feet below ground surface. Reclamation piled excavated soils directly next to the DMC, effectively raising the elevation of the ground surface (though Reclamation has sold some of the spoils for fill). The mounds formed by the spoil piles are 30 feet tall in some areas along the DMC. The California Aqueduct, which is wider and deeper than the DMC, was constructed in a similar manner, including spoil disposal (Werner 1988:6–7).

#### History

The most important historic contexts pertinent to the Proposed Action are the inception of the CVP and the SWP, as four of the five cultural resources identified in the footprint of the Proposed Action are elements of the CVP or the SWP.

The DMC was constructed between 1946 and 1952 and was an essential component of the CVP. The CVP has its origin in the State Water Plan of 1931, which was drafted by the Division of Water Resources and submitted to the California legislature. The State approved the plan in 1933 and passed the Central Valley Project Act. This act provided for the construction, operation, and maintenance of several water control facilities, including the DMC, Shasta Dam, Friant Dam, the Friant-Kern Canal, and the Contra Costa Canal. The DMC, Shasta Dam, Friant Dam, and the Friant-Kern Canal were to operate as two linked reservoir canal systems to bring water from the Sacramento River to the San Joaquin Valley. The CVP was never funded by the State, delaying the beginning of construction until 1946, by which time the Federal government funded the CVP. The CVP is considered one of the most ambitious public works feats ever achieved in the Unites States, resulting in the delivery of 8 maf of

water annually and irrigation water for 3 million acres of privately owned land (Hattersley-Drayton 2000; JRP Historical Consulting Services 1995).

The SWP was developed to respond to an increased water need as a result of a growing population and an increase in agricultural production following World War II. In 1951, the State Legislature authorized what is now the SWP and appropriated funds for detailed studies. Voter approval of the 1.75 billion dollars in bonds was given in 1960. Today, the SWP delivers water from northern California to users in the San Francisco Bay Area, San Joaquin Valley, and southern California communities. The SWP conveys an annual average of 2.5 maf of water through 17 pumping plants, eight hydroelectric power plants, 32 storage facilities, and more than 660 miles of aqueducts and pipelines.

#### **Delta-Mendota Canal**

The DMC is a component of the CVP, both of which are described in Chapter 2 of this EA/IS.

## **California Aqueduct**

The California Aqueduct is a component of the SWP, both of which are described in Chapter 2 of this EA/IS.

#### **Byron Bethany Irrigation District Main Canal**

The overhead transmission line proposed as part of the Intertie crosses over the Byron Bethany Irrigation District Main Canal (CA-Ala-549H) 1,100 feet south of Kelso Road at the DMC. CA-Ala-549H was constructed in 1917 as an earthen ditch and was incorporated into the Byron Bethany Irrigation District as Canal 70 in 1919. The canal draws water from Kellogg Creek to the northwest and conveys water southeast to Mountain House Creek. The canal was significantly modified in 1968 through the addition of turnout gates and concrete lining in some areas (Bakic and Baker 2001).

#### **Tracy Switch Station**

Tracy Switch Station (P-01-10443) is located at the far northern portion of the Proposed Action and forms the terminus of the Proposed Action's overhead transmission line. Reclamation began construction of the facility in 1946 and completed it in 1952. Tracy Switch Station consists of storage tanks, sheds, transmission towers, and other buildings. Much of the station consists of facilities added in the 1960s and 1990s. The switching station controls power for the DMC pumps (Baker 2001a; Bakic 2001a).

#### **Tracy Pumping Plant**

Tracy Pumping Plant (P-01-10442) is located at the far northern part of the Proposed Action and forms the terminus of the Proposed Action's overhead transmission line. Reclamation constructed the pumping station between 1946 and 1952. The pumping station consists of a fenced yard enclosing two office buildings and a storage building, in addition to a pump station on the DMC. The pumping station was built to lift water from the DMC and is an integral part of the CVP. (Baker 2001a; Bakic 2001b.)

# 3.10.2 Approach

# Methodology

The purpose of this section is to determine whether the Proposed Action has the potential to significantly affect cultural resources. This cultural resource assessment follows guidance and procedures set forth by CALFED and Reclamation (CALFED Bay-Delta Program 2000c; Bureau of Reclamation 2000). The assessment is based on records searches at the Central California Information Center (CCIC) and the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS); a review of published literature on the prehistory, ethnography, and history of the project vicinity; and consultation with the NAHC in Sacramento.

Records searches were conducted at the CCIC and the NWIC on May 5 and 16, 2003, respectively. The CCIC manages the State of California's database of previous cultural resource studies and known cultural resources for a sevencounty area, including San Joaquin County; the NWIC manages the records for a 16-county area, including Alameda County. Information provided by CHRIS, combined with the published literature on California's cultural resources, forms the baseline or existing conditions for cultural resources in environmental reviews.

In addition to the database of previous studies and known resources, the records searches included review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), *California Historical Landmarks*, *California Points of Historical Interest*, the California Office of Historic Preservation's Historic Resource Inventory listings for Alameda and San Joaquin Counties, California Department of Transportation's State and Local Bridge Survey, and historic maps and secondary historical sources (California Department of Parks and Recreation 1976; General Land Office 1857; Thompson & West 1976 [1878]; U.S. Geological Survey 1914, 1948).

This impact assessment focuses on those cultural resources that are considered historic properties for the purposes of Section 106 of the NHPA (36 CFR 800.16[I]) and historical resources or unique archaeological resources as defined by CEQA (14 CCR 15064.5[a]; Public Resources Code [PRC] 21084.1 and

21083.2). The headings below discuss the Federal and State criteria by which cultural resources are determined significant or not significant. This discussion is followed by Federal and State criteria for identifying adverse effects and significant environmental effects or impacts on cultural resources. Finally, significance statements for each cultural resource that would be affected by the Proposed Action are provided.

#### Section 106 of the National Historic Preservation Act

Under NEPA, Federal agencies must "preserve important historic, cultural and natural aspects of our national heritage" (Section 101 (b)(4)). Section 106 of NHPA (16 U.S.C. 470f) requires Federal agencies to take into account the effect of their undertakings on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. Reclamation's directives and standards specify that NEPA actions will be coordinated with the compliance process for Section 106 of the NHPA (detailed in implementing regulations at 36 CFR 800). The Section 106 process normally includes the following steps:

- delineate the area of potential effects (APE) and identify and evaluate cultural resources in consultation with the SHPO and any other consulting parties;
- assess adverse effects on historic properties that are eligible for inclusion in the NRHP, and notify the Advisory Council on Historic Preservation if adverse effects are identified;
- consult with the SHPO and other participating parties to resolve adverse effects to historic properties, generally resulting in a memorandum of agreement stipulating how the properties will be treated.

Historic properties are any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP (36 CFR 800.16[1]). The NRHP criteria for evaluation are defined at 36 CFR 60.4 as follows:

- The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and
- that are associated with events that have made a significant contribution to the broad patterns of our history; or
- that are associated with the lives of persons significant in our past; or
- that embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

■ that have yielded, or may be likely to yield, information important in prehistory or history.

Adverse effects occur when those characteristics of a historic property that qualify it for inclusion in the NRHP are altered in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association (36 CFR 800.5[a]). Adverse effects include:

- physical destruction of or damage to all or part of the property;
- alteration of the property that is not consistent with the Secretary of the Interior's standards for the treatment of historic properties (36 CFR 68);
- removal of the property from its historic location;
- change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- neglect of a property that causes its deterioration; and
- transfer, lease, or sale of the property out of Federal ownership or control.

#### **California Environmental Quality Act**

Under CEQA, a historical resource is a cultural resource that is listed or eligible for listing in the CRHR (PRC 5024.1). A cultural resource may be eligible for inclusion in the CRHR if it is a building, site, structure, object, or district, and:

- is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- is associated with the lives of persons important in our past;
- embodies the distinctive characteristics of a type, period, region, or method
  of construction, or represents the work of an important creative individual, or
  possesses high artistic values; or
- 4. has yielded, or may be likely to yield, information important in prehistory or history.

Properties that are listed in or eligible for listing in the NRHP are considered eligible for listing in the CRHR and therefore are historical resources for the purpose of CEQA (PRC 5024.1[d][1]).

In addition, CEQA also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of a historical resource as above, and "unique archaeological resources." An archaeological resource will be considered unique if it:

- is associated with an event or person of recognized significance in California or American history or recognized scientific importance in prehistory;
- can provide information that is of demonstrable public interest and is useful
  in addressing scientifically consequential and reasonable research questions;
- has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind (PRC 21083.2).

The State CEQA Guidelines (14 CCR 15064.5[c]) state that the lead agency must treat an archaeological resource that meets the definition of a historical resource according to the provisions of PRC 21084.1, 14 CCR 15064.5, and 14 CCR 15126.4. If an archaeological resource does not meet the definition of a historical resource, but does meet the definition of a unique archaeological resource, the lead agency is obligated to treat the resource according to the provisions of PRC 21083.2 (14 CCR 15064.5[c][3]).

According to the State CEQA Guidelines (14 CCR 15064.5), a project with an effect that may cause a substantial adverse change in the significance of a historical resource or a unique archaeological resource is a project that may have a significant effect on the environment (14 CCR 15064.5[b]). CEQA further states that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. Actions that would materially impair the significance of a historical resource are those that would demolish or adversely alter those physical characteristics of a historical resource that convey its significance and qualify it for inclusion in the CRHR or in a local register or survey that meets the requirements of PRC 5020.1(k) and 5024.1(g).

# **Significance Criteria**

Impact assessments for cultural resources are based on the type of resource, a determination of whether a resource is considered significant (i.e., is a historic property or historical resource, as defined above), the type of impact, and the extent of the impact. Impacts on cultural resources are considered significant if they would adversely affect a historic property or a historical resource or unique archaeological resource.

As indicated under Methodology, impacts on cultural resources that may result from a Federal action include ground disturbance, modification and alteration of historic structures, visual and auditory intrusions to a resource's historic setting, and vandalism.

Physical damage to or destruction of significant cultural resources, particularly archaeological sites, may affect the physical integrity of those resources, thus reducing their information or research potential (NRHP Criterion D or CRHR Criterion 4). Physical damage or alteration may also have deleterious effects on

the characteristics of a cultural resource that convey its significant association with an important historical event, person, or architectural/design quality (NRHP Criteria A–C or CRHR Criteria 1–3).

## **Resource-Specific Significance Statements**

#### **Delta-Mendota Canal**

The DMC has been recommended eligible to the NRHP under Criteria A and C and has exceptional significance for its key role in the original CVP (Egherman 2001; Farrell 2001; JRP Historical Consulting Services 1995). The DMC retains overall historic integrity (Egherman 2001; Farrell 2001). For the purposes of the Proposed Action, the DMC will be considered a historic property under Section 106 of the NHPA and a historical resource for the purposes of CEQA.

#### California Aqueduct

JRP Historical Consulting Services (1995) evaluated the California Aqueduct for NRHP eligibility. This evaluation included full consideration of the exceptional significance criteria, or criteria considerations, for cultural resources younger than 50 years (Sherfy and Luce 1998). The evaluators concluded that although the California Aqueduct rivals the DMC as an outstanding engineering feature (NRHP criterion C) and has a significant association with the history of irrigation and water development in California (NRHP criterion A), it was simply too young (about 20 years old in 1995) to warrant listing in the NRHP. Conditions 8 years later do not appear to warrant reassessment of the California Aqueduct's significance. Therefore, the California Aqueduct does not appear to constitute a historic property or a historical resource.

#### **Byron Bethany Irrigation District Main Canal**

PAR Environmental Services, Inc., evaluated the significance of CA-Ala-549H in 2001 and deemed it ineligible for listing in the NRHP and the CRHR. Other portions of the canal were determined ineligible for listing in the NRHP by a consensus determination of the Corps and the SHPO (Baker 2001b; California Office of Historic Preservation 2000:1). Therefore, the canal does not qualify as a historic property or a historical resource.

#### **Tracy Switch Station**

PAR Environmental Services, Inc., evaluated the significance of the Tracy Switch Station in 2001 and recommended it ineligible for listing in the NRHP and the CRHR. Although an integral part of the CVP, which qualifies the Tracy Switch Station for NRHP and CRHR eligibility under Criteria A and 1, the

station has suffered a substantial loss of integrity through the addition of several buildings in the 1960s and 1990s. Therefore, the Tracy Switch Station does not appear to qualify as a historic property or a historical resource (Baker 2001a; Bakic 2001a).

#### **Tracy Pumping Plant**

PAR Environmental Services, Inc., evaluated the significance of the Tracy Pumping Plant (P-01-10442) in 2001 and recommended it eligible for listing in the NRHP and the CRHR. Tracy Pumping Plant is an integral element in the development and operation of the CVP and appears to be significant under Criteria A and C of the NRHP and Criteria 1 and 3 of the CRHR. Furthermore, Tracy Pumping Plant retains historic integrity. For the purposes of the Proposed Action, the Tracy Pumping Plant will be considered a historic property under Section 106 of the NHPA and a historical resource for the purposes of CEQA.

## **Summary of Cultural Resource Significance**

The proposed action would potentially affect five cultural resources. Each was evaluated for significance according to criteria established by the NRHP, CEQA, and the CRHR. Of these, previous cultural resource studies identify the DMC and the Tracy Pumping Plant as historic properties according to the NRHP criteria and historical resources for the purposes of CEQA. The California Aqueduct, Byron Bethany Irrigation District Main Canal, and the Tracy Switch Station are not historic properties or historical resources. Any effects on the latter three cultural resources would be considered less than significant and would not require mitigation. Therefore, these resources do not require further consideration under Section 106 of the NHPA, and impacts would be considered less than significant under CEQA.

# 3.10.3 Environmental Consequences

#### No Action Alternative

Under the No Action Alternative, existing CVP operations would continue; as a result, no impacts on cultural resources would occur.

# **Proposed Action Alternative**

Implementation of the Proposed Action would result in direct (damage) and indirect (visual intrusions to historic settings) impacts on cultural resources. Damage to cultural resources would result from construction of the Intertie facilities. Visual intrusions to the historic setting of cultural resources would

result from construction of the overhead transmission line. Impacts are discussed below under separate headings and by impact type.

#### **Construction Impacts**

# Impact Cul-1: Modification of Known Cultural Resources Resulting from Construction

Modification of the DMC (and the California Aqueduct) would result from construction of the Proposed Action. The modification would result from excavating the intake and discharge structures into the sides of the canals. Although construction of the aboveground Intertie facilities would result in some loss of historic integrity (alteration of design) for the DMC, this impact is not significant and may constitute a minor beneficial effect. Among other purposes for which the DMC is historically significant, the DMC was constructed to provide water to users south of the Delta. The present condition of the DMC impedes the accomplishment of that goal; implementation of the Proposed Action would remedy this deficiency. Despite this benefit, the Proposed Action would represent a departure from the canal's original design. Given the scale of the Intertie facilities in the context of the DMC's size and overall retention of historic integrity, however, alteration of the canal's design cannot be said to be an adverse effect or significant impact. No mitigation is required.

# Impact Cul-2: Visual Intrusions to the Historic Setting of Significant Cultural Resources from Transmission Line Construction

Construction of overhead transmission lines would result in the addition of structures that are not from the period of significance of identified cultural resources and may be out of character with the historic setting of cultural resources such as historic canals and buildings. Visual intrusion to the historic setting of significant cultural resources is considered a significant impact under NEPA and CEQA. The bullets below indicate the cultural resources affected by this impact by location/project element.

- Construction of the overhead transmission line would introduce a new elements to the historic setting of the DMC, which is considered a historic property under the NRHP criteria and is a historical resource for the purposes of CEQA. Numerous power lines already cross over the DMC and are part of the CVP system. The addition of the overhead transmission line under the Proposed Action would not constitute a departure from the overall historic setting of the DMC. Construction of the Proposed Action would introduce aboveground structures that are at variance with the historic setting of the DMC. Given the scale of the DMC and the minor scale of the new construction (less than 1 acre), the addition of new structures would not result in a major loss of historic integrity. Therefore, this effect does not constitute an adverse effect or significant impact. No mitigation is required for this impact.
- Construction of the overhead transmission line would introduce a new element to the historic setting of the Tracy Pumping Plant, which is a historic property under the NRHP criteria and is a historical resource for the purposes

of CEQA. Numerous power lines, however, already cross over the Tracy Pumping Plant and are part of the CVP system. The addition of the overhead transmission line under the Proposed Action would not constitute a departure from the overall historic setting of the Tracy Pumping Plant. Therefore, this effect does not constitute an adverse effect or significant impact. No mitigation is required for this impact.

# Impact Cul-3: Inadvertent Damage or Destruction of Buried Archaeological Sites and Human Remains

The Proposed Action has little potential to inadvertently damage or destroy buried archaeological sites or human remains through construction of Intertie facilities and placement of the overhead transmission line. The footprint of the Proposed Action is highly disturbed to depths of up to 25 feet, and the areas slated for ground disturbance are composed of fill piles up to 30 feet high. The likelihood of intact buried archaeological deposits or human remains is remote. It is highly unlikely, therefore, that the Proposed Action would result in significant effects or impacts on buried archaeological sites or human remains. However, in the unlikely event that such discoveries are made during construction, the following Proposed Action environmental commitment would be implemented (taken from Chapter 2.3.5, under Environmental Commitments).

# Stop Work and Implement Measures to Protect Archaeological Sites and Human Remains If Discovered during Ground-Disturbing Activities.

In the unlikely event that buried cultural resources (such as chipped or ground stone, historic debris, building foundations, or non-human bone) or human remains are inadvertently discovered during ground-disturbing activities, construction work will stop and the following measures will be implemented.

The contractor will immediately cease work within 100 feet of the find. All construction personnel will leave the area. Vehicles and equipment will be left in place until a qualified archaeologist identifies a safe path out of the area. The onsite supervisor will flag or otherwise mark the location of the find and keep all traffic away from the resource. The on-site supervisor will immediately notify the Reclamation archaeologist within 24 hours of the find.

Upon cessation of work and notification of responsible parties, the Reclamation archaeologist will determine whether the resource can be avoided. If avoidance is feasible and impacts on the cultural resource have not occurred, the project can proceed in accordance with recommendations from the Reclamation archaeologist. If the resource cannot be avoided or it already has been affected by construction, treatment of the find must comply with the discovery procedures of Section 106 of the NHPA (36 CFR 800.13[3]). These procedures consist of a determination of significance; consultation among Reclamation, other consulting parties (such as DWR), and SHPO; and, if the resource is determined to be significant, suitable implementation of mitigation, in consultation with SHPO.

If any burials or fragmentary human remains of Native American origin are encountered as a result of project construction, the contractor will immediately cease work within 100 feet of the find. All construction personnel will leave the

area. Vehicles and equipment will be left in place until a qualified archaeologist identifies a safe path out of the area. The on-site supervisor will flag or otherwise mark the location of the find and keep all traffic away from the resource. The on-site supervisor will immediately notify Reclamation and DWR archaeologists within 24 hours of the find. Reclamation is responsible for compliance with the Native American Graves Protection and Repatriation Act (43 CFR 10) if inadvertent discovery of Native American remains occurs on Federal lands. Reclamation and the Authority are responsible for compliance with State laws relating to the disposition of Native American burials (PRC 5097 and California Health and Safety Code 7050.5[b]).

# Impact Cul-4: Inadvertent Damage or Destruction of Unique Paleontological Resources

Although no unique paleontological resource is known to occur at the project site, according to a geotechnical report prepared for Reclamation, the project site is underlain by the Miocene-Age Neroly Formation. Based on a World Wide Web keyword search, the Neroly Formation is known to contain vertebrate fossils, although it is unknown whether such fossils occur in this formation at the project site. The footprint of the Proposed Action is highly disturbed to depths of up to 25 feet, and the areas slated for ground disturbance are composed of fill piles up to 30 feet high. The likelihood of paleontological resources is remote. It is highly unlikely, therefore, that the Proposed Action would result in significant effects or impacts on unique paleontological resources. However, in the unlikely event that such discoveries are made during construction, the following Proposed Action environmental commitment would be implemented (taken from Chapter 2.3.5, under Environmental Commitments).

#### Stop Work to Protect Unique Paleontological Resources

In the unlikely event that unique paleontological resources are discovered during construction, construction will be halted and a qualified professional will be called to the site in order to recover and curate the materials.

# 3.10.4 Cumulative Impacts

With implementation of the identified measures, the Proposed Action would avoid adverse effects to historic properties, would not cause a substantial adverse change in the significance of a historical or archaeological resource, and would not directly or indirectly destroy a unique paleontological resource or unique geologic feature or cause unauthorized disturbance of any human remains. No impacts on cultural resources (including historic properties, historical resources, paleontological resources, and human remains) would result from implementation of the Proposed Action that would make a considerable contribution to a cumulative impact on cultural resources.